

## **BRIEF REPORT**

### **INDEX OF PSYCHIC HEALTH - A SUPPLEMENT TO A ROUTINE MEDICAL EXAMINATION**

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Within a holistic conception of health and disease, the level of psycho-social functioning is determined by three main dimensions: biological, psychic and social. Thus, human life activity can be considered as a biopsychic-social entity. In order to state whether mental health of a given subject in a certain period of time is better or worse, it is necessary to limit the range of this notion to such elements which enable one to determine a criterion for the level of psycho-social functioning. Achievement of this aim has been assumed in the dependent variable adopted by us. Its operation process relies on the evaluation of an individual, in the context of recurring

complaints having the character of "pre clinical symptoms". It is based on an empirical construction of an "index". Factors which may affect psycho-social functioning (and/or explain it) are represented via independent variables. In the first place, a number of psycho-social variables have been taken into account.

Investigations were conducted among youth (II and IV form) from two secondary schools.

**Table 1.- The size of the investigated population.**

Form	1 School	2 School	Total
II	101	45	146
IV	96	38	134
<b>Total</b>	<b>197</b>	<b>83</b>	<b>280</b>

A feeling of psycho-physiological discomfort as a sign of possible pathological changes in an organism may appear in all dimensions of life (biological, psychical and social) or only in some of them. Increased emotional tension, anxiety, mood depression, appearance of complains from particular organs or systems, lowering tolerance to difficult interpersonal contacts, feeling of maladaptation in social environment, weakening of motivation etc. are the most common indicators of declining level of psycho-social functioning. These "symptoms" may often be linked to the process of solving some difficult life problems. In case of correct psycho-physical construction and with simultaneous undertaking of rational activity they may turn out to be temporary. An alternative to such an interpretation could be a suggestion that these complains form perhaps a set of "pre clinical symptoms".

In order to estimate the level of psycho-social functioning, a data questionnaire was prepared and an index of psychic health (social dimension) was constructed on its basis.

The questionnaire included:

1. Age,
2. Family situation (financial status, conflicts, siblings and the like),
3. Social situations (company, conflicts, social expectations and the like),
4. Motivation for further education and expectations for the future,
5. Statements concerning subjective feeling of psychophysical health.

The following methods were applied to construct sub-indices of health-psychic and biological dimensions:

- A. Subjective direct and indirect examination: anamnesis, standardized psychiatric interview, Zung's Scale of Depression Self-evaluation, Hamilton's Anxiety Scale, Questionnaire of Psychosomatic Symptoms;
- B. Objective examination: routine examination of somatic conditions, examination of psychic condition.
- C. Additional investigations: analysis of additional examinations and consultations by specialists, analysis of medical documentation (pupils' health books and charts, medical certificate of the Regional Military

Medical Board, active counselling books, documentation from school physicians).

On the basis of the above-mentioned methods, empirical construction of a psychic health index (global dimension) was carried out (arithmetic mean of biological, psychic and social sub-indices). Then, normalization to sten scale was performed, where the results were considered to be high (10-7 sten), average (6-5 sten), low (4-1 sten).

Interpretation of indices is inversely proportional to the height. That means, that subjects whose results were in the range 7-10 sten present psychic discomfort. Evaluation of the investigated population as regards the above index is as follows:

**Table 2.- Distribution of the investigated population as regards the level of sub-indices.**

Index dimension	Biopsychosocial		Biological		Psychic		Social	
	N	%	N	%	N	%	N	%
High	91	32.5	88	31.4	93	33.2	90	32.1
Average	114	40.7	107	38.2	100	35.7	123	43.9
Low	75	26.8	85	30.4	87	31.1	67	23.9

Objectivization of the constructed index was carried with recourse to the following psychological methods:

1. Standardized psychological interview
2. Strelau's Questionnaire of Temperaments
3. Eyseneck's MPI
4. Gough and Heilbrun's Tests of Adjectives
5. Plonska and K. Wrzesniewski's STEPPE
6. Raven's TMS

## RESULTS

The construction of the index of psychic health enables characterization of the examined conception. The index of bio-psycho-social dimension allows quick and objective evaluation of the feeling of psychic comfort. Whenever its level is in the high range of results, the system of the remaining three sub-indices let the researcher see all the health dimensions in which the psychic discomfort is most intensive.

Objectivization of the index, with the help of the psychological methods mentioned, was performed via a correlation procedure and investigation of the index's prediction based on the analysis of linear regression model. The obtained results supported the claim, that the index construction appeared to be well-founded. Basing on the value of the correlation coefficients, characteristic features of subjects with a feeling of psychic discomfort were defined. Such subjects showed: emotional liability, increased level of anxiety, irritability, changing mood, aggressiveness, impulsiveness, pessimism, passiveness, wariness, resignation, decreased excitability, increased level of anxiety conditioned by the situation, and what is more important tendency to react with anxiety, uneasiness, predisposition towards concentration of emotional states, declining interests, increased susceptibility to stimulation of the environment, decreased demand for interpersonal contacts, feeling of isolation, low self-evaluation and low level of self-acceptation.

Prognostic value of the constructed index was verified with recourse to the theory of regression. From among 15 independent variables 8 were qualified for the final model of linear regression. Those variables were thought to be of significance in predicting the level of psycho-social functioning (level of neurotism, anxiety-character, a lie, self-acceptation, mobility of nervous processes, anger-character, anger-state, curiosity-character). When the model of linear regression was applied a multiple correlation coefficient  $R=0.62$  was obtained.

Prognostication could be made via linear regression equation and the obtained parameters would define the regression line. In this way, an index of psycho-social functioning was obtained. The model of multiple linear regression was applied for dependent variables of partial dimensions (biological, psychic and social) in exactly the same way.

It was determined that variables such as neurotism, anxiety-character, a lie, self-acceptation, anger-state, mobility of nervous processes, anger-character and curiosity-character may be taken into consideration in prognostication of psycho-social functioning of youth or in prophylaxis.

## CONCLUSIONS

1. Construction of the index of psychic health may serve as an additional source of information on the quality of man's life.
2. Applications of this index in epidemiological investigations allows for quick orientation in the sphere of feeling of psychic comfort, directing at the same time to particular health dimensions. In this respect, it is a perfect

supplement to routine medical examinations which still do not concentrate satisfactorily on the level of man's psychic functioning.

3. The constructed index may be taken into account in predicting man's behavior as well as in prophylaxis and therapeutic procedures.

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